

REMARKS

Reconsideration of this application, as amended, is respectfully requested. By this Amendment, claim 1 is being amended to more particularly point out and distinctly claim the subject invention. The addition of "new matter" has been scrupulously avoided. Claims 1-8 remain in this application.

In the initial Office Action, claims 1, 5, 6 and 8 were rejected under 35 U.S.C. 103(a) as allegedly obvious over Desjoyaux (Fr 2765909) in view of Sijpesteijn (U.S. 5,215,802), claim 2 was rejected on the same grounds further in view of Raymond (U.S. 5,007,222), and claims 3 and 4 were rejected on the same grounds as claim 1, further in view of Taylor et al. (U.S. 4,514,104). These rejections, to the extent that they are deemed applicable to the claims as now presented, are respectfully, but most strenuously traversed.

The present invention relates to panels for constructing swimming pools and builds, upon applicant's earlier patented approach as presented in Fr 2765909 and its U.S. equivalent, U.S. 6,295,771. In the earlier approach, facing vertical flanges of adjacent panels are provided with sideways protruding tongues to mate with complementary through holes. In addition, one of the vertical flanges is provided with a triangular-shaped sideways protrusion to engage a triangular-shaped matching groove in the other mating vertical flange in order to ensure a seal.

Although a significant advancement over prior assemblies, the earlier approach was not entirely satisfactory. For example, in order to engage the tongues in the through openings, it is necessary to present the structure obliquely and to fold it back through an angle, with the assembly flanges contiguous. It is also often necessary to use a tool of the pliers type to make sure that the tongues fit perfectly into the openings. Further, the earlier sealing arrangement may create problems of flatness along the flat faces of the panels.

The present invention simplifies the method of assembly while at the same time providing an optimally sealed assembly and preserving flatness after assembly with the possibility of achieving assembly entirely automatically or entirely manually.

The present invention employs spaced apart distributed tabs formed in a thickness of a first vertical flange of a panel to engage complementary centering and guiding shapes formed outside a vertical flange of an adjacent panel. The tabs and centering shapes are engaged under a

force exerted in a plane parallel to the vertical flanges. Further, a profiled shape provided along an entire height of the vertical flanges protrudes beyond one of said vertical flanges at a level of the flat surface of the panel, to ensure sealing once the tabs have been engaged in the centering and guide shapes.

The above features and others are now specifically recited in amended independent claim 1. This combination of features is not taught or suggested by the combined teachings of the applied references.

Desjoyaux describes applicant's own earlier panel system. In this system, sideways extending tongues 1j engage vertically extending through apertures 1k and a projecting profile 1e engages a triangular shaped slit 1g when a sideways force is exerted along the vertical flanges of adjacent panels. This earlier system is clearly different from the claimed invention in the form and shape of the structural connections as well as the direction of exerted force.

Sijpesteijn relates to the construction of a mat for treading upon, which employs connecting structures 6 and 8 having mating protrusions 13. In the embodiment of Figure 1 of this reference, the coupling elements are located at mating ends of adjacent mats (in the other embodiments of this reference a separate coupling element is employed.)

The mat coupling approach of Sijpesteijn is applied to a different field of endeavor, is used to solve a different problem, and, therefore, is not likely to be considered by one concerned with the assembly of panels for creation of a swimming pool. Further, the coupling elements of the secondary reference extend along the full length of the mats and are not distributed and spaced apart along the length of a flange. Moreover, there is no suggestion in these references themselves as to why the coupling approach of floor mats should be applied to the construction of panels for producing swimming pools.

Finally, even if the teachings of these references were combined, the structure of amended independent claim 1 would still not result. Specifically, there is no provision of the claimed profiled shape provided along an entire height of the vertical flange which protrudes beyond one of said vertical flanges at a level of the flat surface of the panels. To the contrary, the sealing arrangement (elements 1e and 1g) of Desjoyaux would preclude engagement of tabs with mating wells through application of a force in a plane parallel to the vertical flanges.

Accordingly, independent claim 1 is believed to patentably distinguish over the applied prior art. None of the other applied references overcome the noted deficiencies of the prior art. The dependent claims are allowable for the same reasons as the independent claim from which they all ultimately depend, as well as for their additional limitations.

Allowance of all of the pending claims is respectfully requested. If it would advance the prosecution of this application, the Examiner is cordially invited to contact applicant's representative at the below listed telephone number.

A Request for a One-Month Extension of Time and the associated fee are enclosed.

Respectfully submitted,


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